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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/989,558      | 11/20/2001  | Frank van Diggelen   | GLBL_005 D2         | 2109             |

26291 7590 02/26/2003

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|                  |              |
|------------------|--------------|
| EXAMINER         |              |
| PIPALA, EDWARD J |              |
| ART UNIT         | PAPER NUMBER |
| 3661             |              |

DATE MAILED: 02/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.  
**09/989,558**Applicant(s)  
**Frank Van Diggelen**Examiner  
**Edward Pipala**Art Unit  
**3661**

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on Dec 4, 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 36-38 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 36-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Nov 20, 2001 is/are a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5 & 6 6) ☐ Other:

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### DETAILED ACTION

This Office action is in response to the amendment filed December 4, 2002 as well as the IDS papers filed 9/9/02 and 9/16/02.

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 36-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Moeglein et al.

Pat. No. 6,215,441.

Moeglein et al. teaches methods and apparatuses which use satellite position system (SPS) reference receivers. In one example of the invention, a plurality of SPS reference receivers, such as Global Positioning System (GPS) reference receivers, each having a known position, are dispersed over a geographical region. Each of the SPS reference receivers transmits

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into a communication network, a representation of at least a portion of a satellite navigation message, such as **satellite ephemeris data**, received from SPS satellites in view of the particular SPS reference receiver. A plurality of digital processing systems, such as a first and a second digital processing systems, are coupled to the communication network to receive the **satellite ephemeris data** which is transmitted through the communication network. The first digital processing system receives a first pseudorange data from a first SPS mobile receiver and calculates a first position information of the first SPS mobile receiver from a representation of the first pseudorange data and from **satellite ephemeris data** received from the communication network. The first digital processing system may also receive pseudorange corrections from the communication network and use these corrections to correct the first pseudorange data to provide the representation of the first pseudorange data. The second digital processing system receives a second pseudorange data from a second SPS mobile receiver and calculates a second position of the second SPS mobile receiver using the second pseudorange data (which may be corrected using pseudorange corrections from the communication network) and using **satellite ephemeris data** received from the communication network.

In one embodiment of this example of the invention, the mobile SPS receivers are communicatively coupled with the digital processing systems in part through a wireless cell based communication system. A further digital processing system may also be coupled to the

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communication network to receive pseudorange correction data and to provide merged pseudorange correction data to the digital processing systems through the communication network. Conventional satellite positioning systems (SPS) such as the U.S. Global Positioning System (GPS) use signals from satellites to determine their position. Conventional GPS receivers normally determine their position by computing relative times of arrival of signals transmitted simultaneously from a multiplicity of GPS satellites which orbit the earth. Each satellite transmits, as part of its navigation message, both satellite positioning data as well as data on clock timing which specifies its position and clock state at certain times; this data, found in subframes 1-3 of the GPS navigation message, **is often referred to as satellite clock and ephemeris data and will be referred to as satellite ephemeris data.** Conventional GPS receivers typically search for and acquire GPS signals, read the navigation message from each signal to obtain satellite ephemeris data for its respective satellite, determine pseudoranges to these satellites, and compute the location of the GPS receiver from the pseudoranges and satellite ephemeris data from the satellites. Whereas the transmission of the satellite ephemeris data as taught by Moeglein et al. above, clearly aids in reducing code and frequency uncertainty by eliminating the need to derive the ephemeris data directly from each and every satellite which might be in view of the mobile receiver.

### ***Conclusion***

Applicant's sole argument appears to be that the satellite positioning system taught by Moeglein et al. does not teach each and every element of the claimed subject matter, in that

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Applicant suggests that Moeglein et al. does not teach the use of ephemeris data in order to “reduce code and frequency uncertainty”.

The Examiner suggests and has shown in the text above that this aspect is indeed taught by Moeglein, for the specific reasons suggested by Applicant. Furthermore, this is essentially the **only** reason ephemeris data is transmitted and used by mobile receivers, i.e., to reduce code and frequency uncertainties.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Pipala whose telephone number is (703) 305-9785. The examiner can normally be reached on Monday through Thursday from 7:30 to 6:00.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Bill Cuchlinski, can be reached on (703) 308-3873. The fax phone number for this Group is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks


Washington, D.C. 20231

**or faxed to:** (703) 305-7687, (for formal communications intended for entry)

Hand-delivered responses should be brought to 5 Crystal Park, 2451 Crystal Drive,  
Arlington, VA., Seventh Floor (Receptionist).

Edward Pipala

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